

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/22121

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H04R1/10 H04R5/033 H04R1/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04R

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 099 519 A (GUAN YU) 24 March 1992 (1992-03-24) column 1, line 6 - line 58 abstract	1,21
X	FR 2 755 561 A (NEILL ANDRE O) 7 May 1998 (1998-05-07) page 2, line 6 - line 17 figure 5 page 6, line 8 - line 30 page 3, line 3 - line 34	21
A	---	1-20, 22-30
	--- -/--	

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"Z" document member of the same patent family

Date of the actual completion of the international search

18 November 2002

Date of mailing of the international search report

25/11/2002

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Dionisi, M

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/22121

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	WO 98 45937 A (MORRILL JEFFREY C) 15 October 1998 (1998-10-15) page 2, line 2 - line 17 claim 1 -----	21 1-20, 22-30

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 01/22121

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5099519	A	24-03-1992	NONE
FR 2755561	A	07-05-1998	FR 2755561 A1 07-05-1998
WO 9845937	A	15-10-1998	US 6175633 B1 16-01-2001 AU 6889798 A 30-10-1998 WO 9845937 A1 15-10-1998